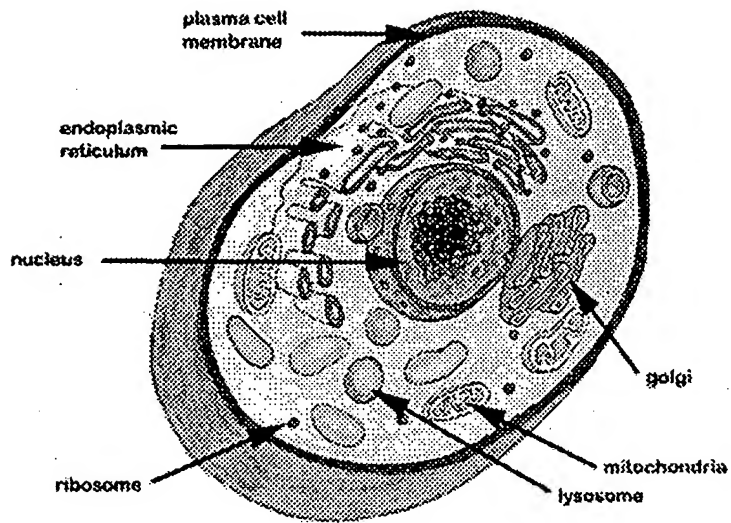


Figure 1.1-1.
Eukaryotic Cell Diagram



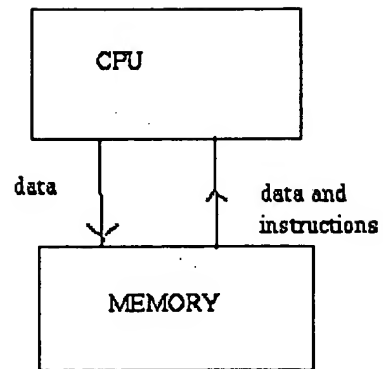


Figure 2.2-1 The Von-Neumann Machine. Illustrates the relationship between memory, data and instructions.

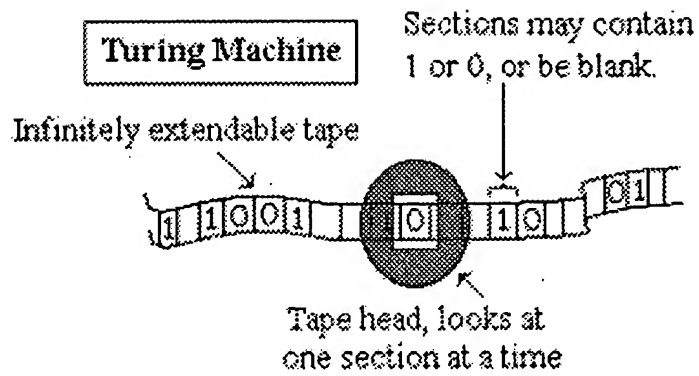


Figure 2.2-2 Turing Machine. Illustrates the concept of an infinite tape with a sequence of binary data. Ref: <http://www.brunel.ac.uk/depts/AI/alife/al-turin.htm>

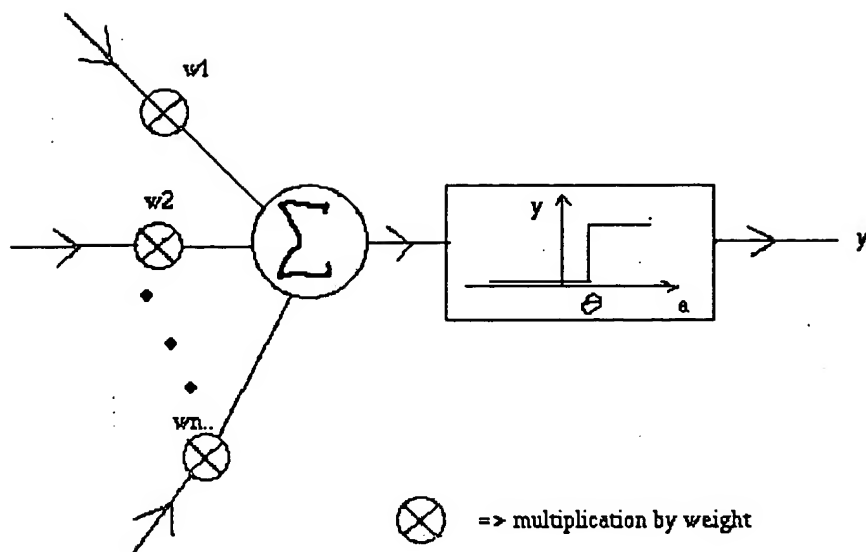


Figure 2.3-1, Neuron for Neural Net Computing, from (Gurney, 2002). Illustrates the method of computation at one node of a neural network.

Flowchart for Genetic Programming

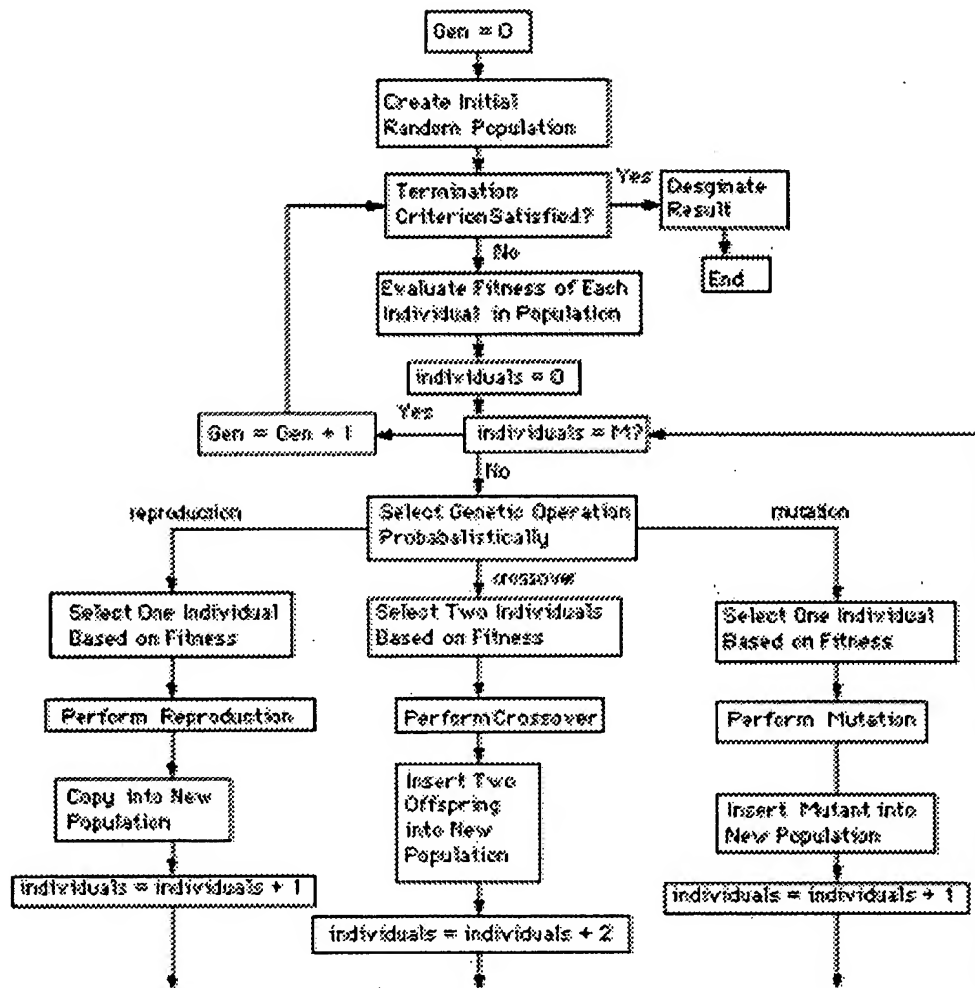


Figure 2.3-2. Flowchart of Genetic Programming. This figure shows the general process of genetic programming including all loops and branches.

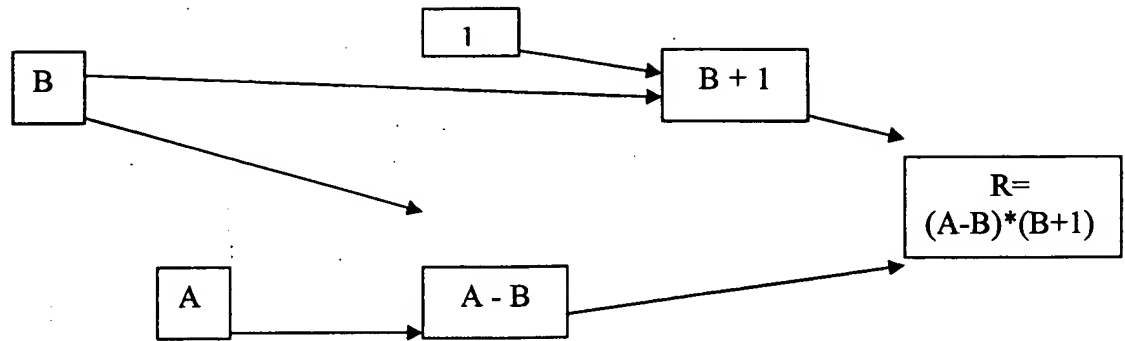


Figure 2.3-3. Dataflow Computing. This diagram illustrates the concept of the flow of operands through a dataflow machine, rather than the classical “fetch and execute”.

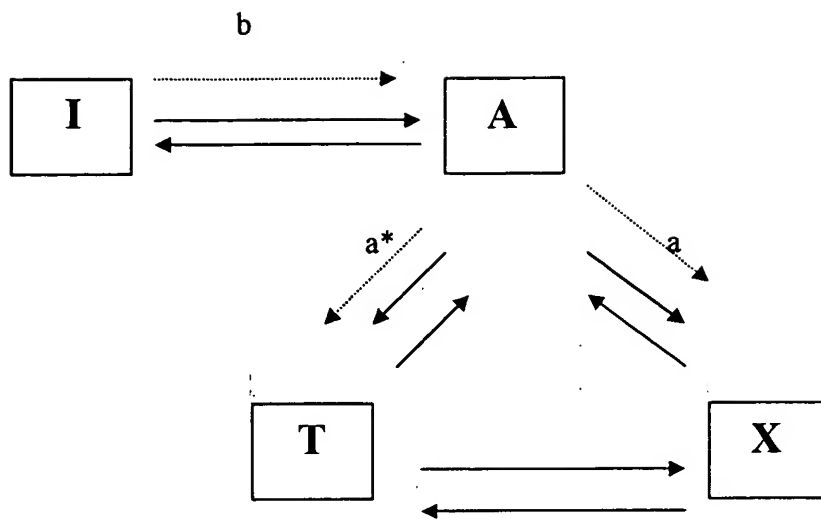


Figure 2.4-1. Regulated Isomerase State Diagram. Shows the flow of information for the Marijuan (1994) model.

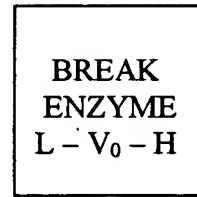
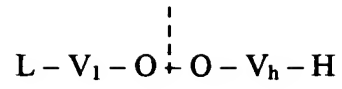
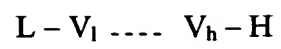


Figure 2.4-2. Shackleton's Join and Break Enzyme. Shows the operators associated with each artificial enzyme.

Figure 3.1-1 First Reaction in Glycolysis.

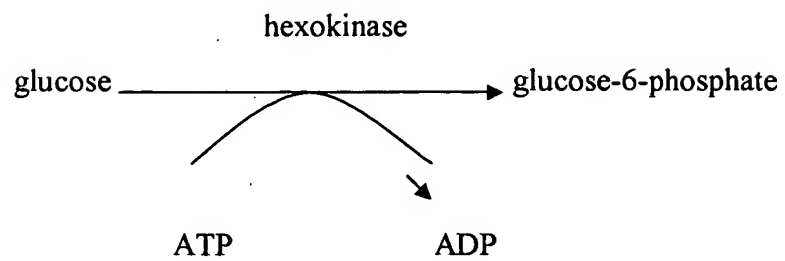
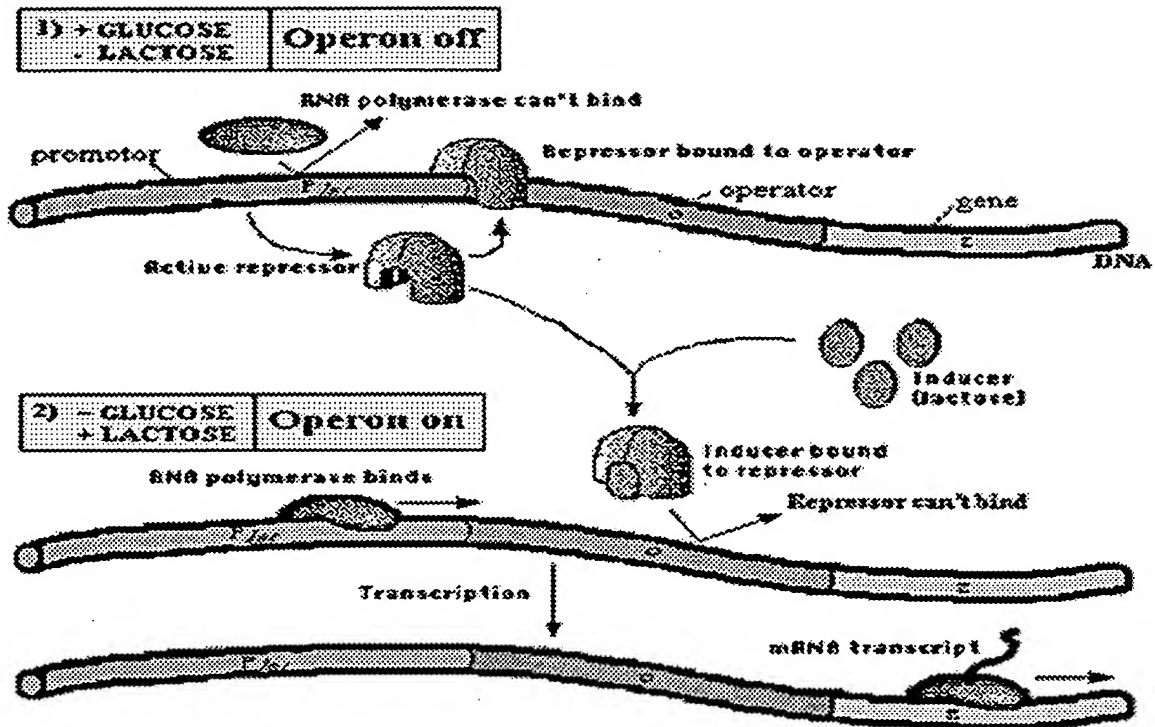


Figure 3.1-2 Lac Operon



Induction of the *lac* Operon

From Access Excellence (2003)

Figure 3.1-3. The JAK STAT Signal Transduction Pathway.
(Sigma-Aldrich, 2003)

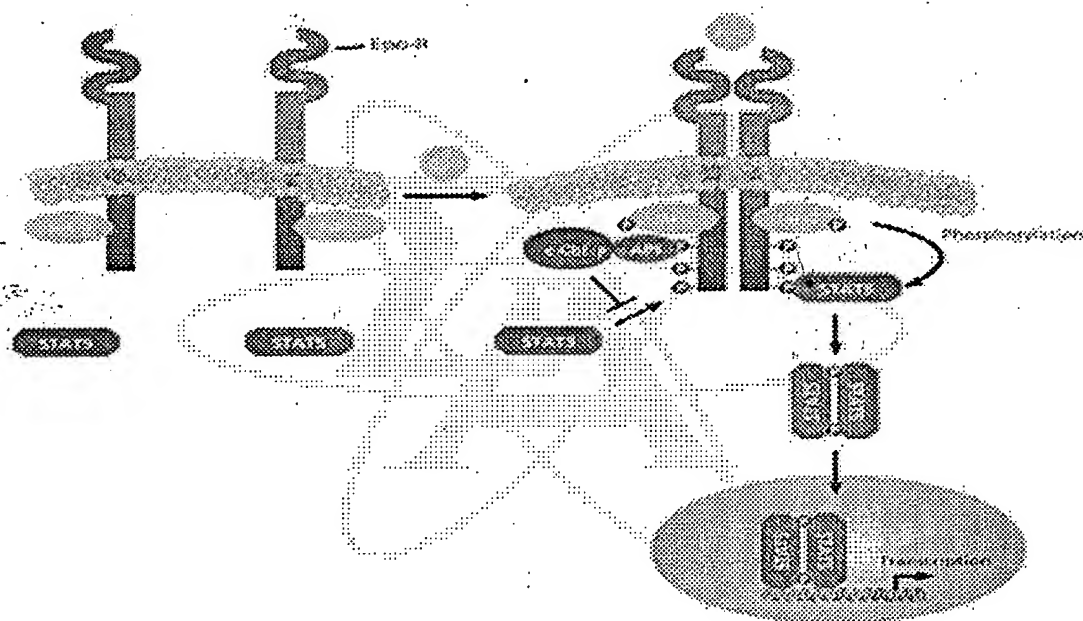


Figure 3.2-1. Illustration of a Node

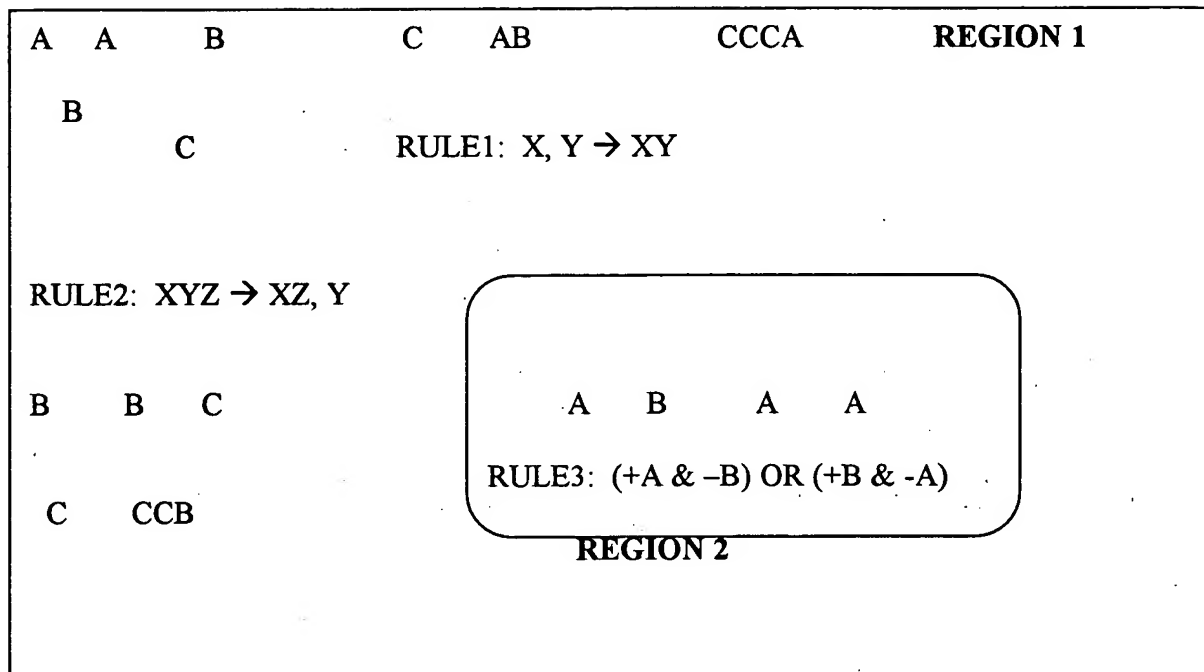


Figure 3.3-1. Illustration of GABA Ion I/O Instruction

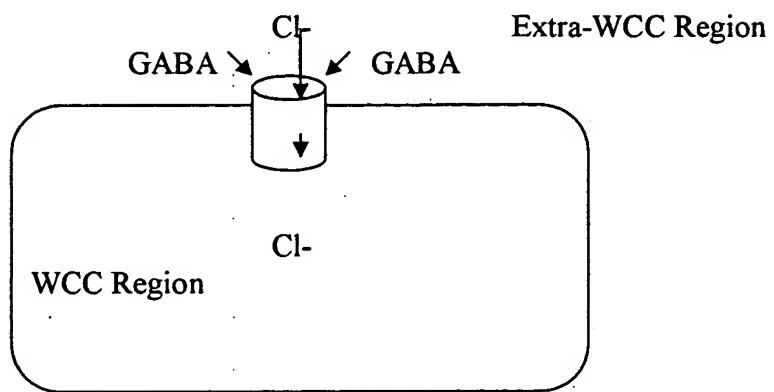


Figure 3.3-2 Second Reaction in Glycolysis.

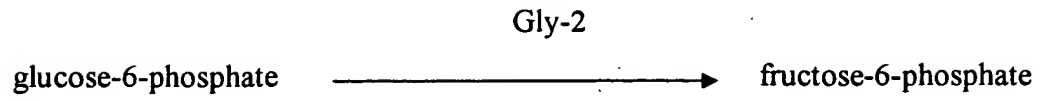
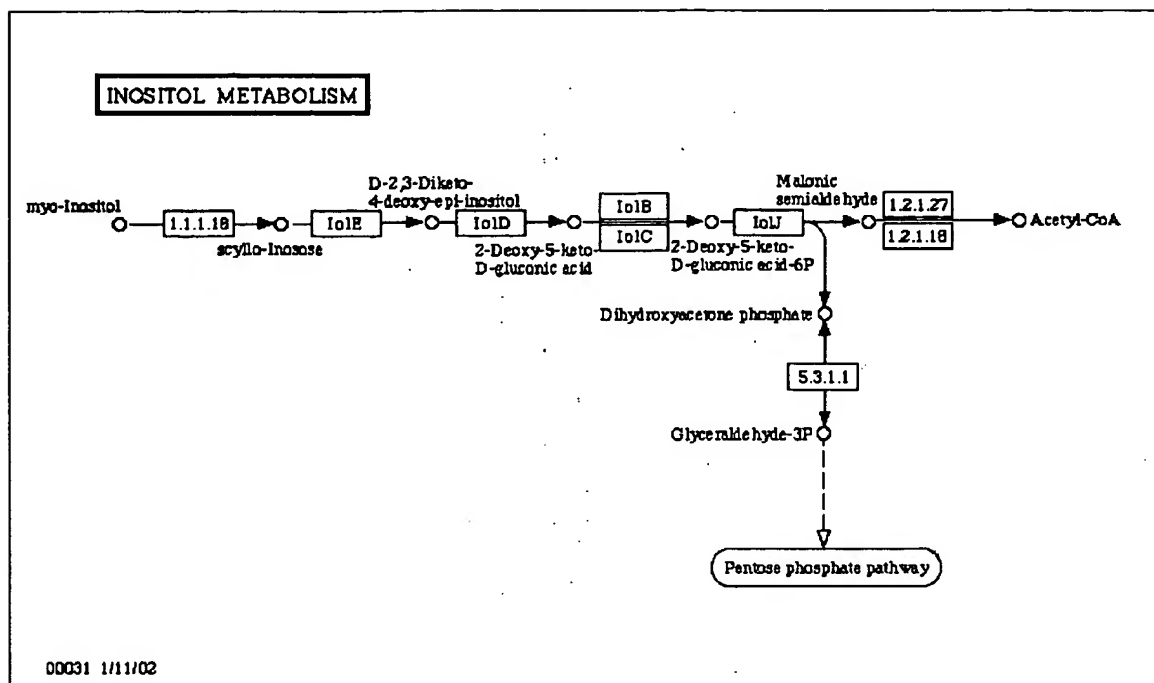


Figure 3.3-3 Illustration of KEGG Pathways for Instruction Compilation



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